



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

DANILO PORRO ET AL.

Serial No.: 10/068,137

Filed: February 6, 2002

For: PROCESSES FOR PRODUCING LACTIC
ACID USING YEAST TRANSFORMED
WITH A GENE ENCODING LACTATE
DEHYDROGENASE

Group Art Unit: 1652

Examiner: Kathleen M. Kerr

Attorney Docket: 2027.547096/RFE
(2005470)

CUSTOMER NO. 23720

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

MAIL STOP AF

Commissioner for Patents

P. O. Box 1450

Alexandria, VA 22313-1450

CERTIFICATE OF MAILING (37 C.F.R. § 1.8)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: MAIL STOP AF, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on the date below.

January 25, 2005

Cynde Meinhart
Cynde Meinhart

Sir:

In response to the Examiner's comments regarding the Information Disclosure Statement filed April 22, 2004, discussed in the Final Office Action dated November 26, 2004, Applicants enclose a revised Form PTO-1449 citing documents which the Examiner did not consider. For convenience of the Examiner, a copy of Form PTO-1449 which was attached to the Final Office Action is enclosed.

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents

02/01/2005 MAHME1 00000011 10068137

01 FC:1806

180.00 OP

listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

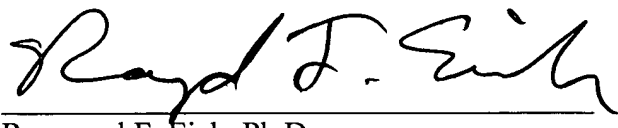
In accordance with 37 C.F.R. §§ 1.97(g),(h), this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

A fee as set forth in 37 C.F.R. § 1.17(p) in the amount of \$180.00 is enclosed herewith. If an appropriate check has not been enclosed, or if it is insufficient, the Director is hereby authorized to deduct said fee from Williams, Morgan & Amerson, P.C., Deposit Account No. 50-0786/2027.547096RFE.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,

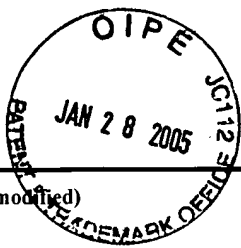
WILLIAMS, MORGAN & AMERSON, P.C.
CUSTOMER NO. 23720



Raymund F. Eich, Ph.D.
Reg. No. 42,508
10333 Richmond, Suite 1100
Houston, Texas 77042
(713) 934-4065
(713) 934-7011 (fax)

AGENT FOR APPLICANTS

January 25, 2005



REVISED

Page 1 of 1

Form PTO-1449 (modified)

Atty. Docket No.
2027.547096/RFESerial No.
10/068,137

List of Patents and Publications for Applicant's

Applicants
Danilo Porro et al.

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Filing Date:
February 6, 2002Group:
1652U.S. Patent Documents
*See Page 1*Foreign Patent Documents
*See Page 1*Other Art
See Page 1

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A26	2002/0004611	01/10/02	Eyal et al.	562	589	08/10/01
	A27	2003/0166179	09/04/03	Rajgarhia et al.	435	139	11/23/01
	A28	2003/0190630	10/09/03	Rajgarhia et al.	435	6	09/23/02

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C2	Genga <i>et al.</i> , "Mitochondrial NAD, L-Lactate Dehydrogenase and NAD, D-Lactate Dehydrogenase in the Yeast <i>Saccharomyces Cerevisiae</i> ," <i>Microbiologica</i> 6(1):1-8 (1983) (Abstract)
	C3	Goffin <i>et al.</i> , "Lactate Dehydrogenase-Independent Lactic Acid Racemization in <i>Lactobacillus Plantarum</i> " (2003) (Abstract, Mtg., <i>Belgian Soc. of Biochem. and Molec. Biol.</i> , 2/14/2003)
	C6	Skory, "Lactic Acid Production by <i>Saccharomyces Cerevisiae</i> Expressing a <i>Rhizopus Oryzae</i> Lactate Dehydrogenase Gene," <i>J. Ind. Microbiol. Biotechnol.</i> , 30:22-27 (2003)

EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

COPY

Page 1 of 3

Form PTO-1449 (modified)

List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No.

2027.547096/RFE

Serial No.

10/068,137

Applicants

Danilo Porro et al.

Filing Date:

February 6, 2002

Group:

1652

U.S. Patent Documents

See Page 1

Foreign Patent Documents

See Page 1

Other Art

See Page 2

U.S. Patent Documents

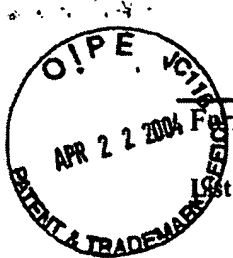
Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
KK	A2	2,024,565	12/17/35	Braun	260	119	
	A3	4,885,247	12/05/89	Datta	435	139	
	A4	5,068,418	11/26/91	Kulphathipanja et al.	562	580	
	A5	5,464,760	11/07/95	Tsai et al.	435	139	
	A6	5,503,750	04/02/96	Russo, Jr. et al.	210	641	
	A7	5,510,526	04/23/96	Baniel et al.	562	580	
	A8	5,574,180	11/12/96	McQuigg et al.	558	147	
	A9	5,641,406	06/24/97	Sarhaddar et al.	210	656	
	A10	5,780,678	07/14/98	Baniel et al.	562	580	
	A11	5,892,109	04/06/99	Baniel et al.	562	580	
	A12	5,959,144	09/28/99	Baniel	562	580	
	A13	6,001,255	12/14/99	Eyal et al.	210	638	
	A14	6,087,532	07/11/00	Baniel et al.	562	580	
	A15	6,160,173	12/12/00	Eyal et al.	562	589	
	A16	6,187,951	02/13/01	Baniel et al.	562	580	
	A17	6,229,046	05/08/01	Eyal et al.	562	589	
	A18	6,268,189	07/31/01	Skory	435	139	
	A19	6,280,985	08/28/01	Caboche et al.	435	139	
	A20	6,319,382	11/20/01	Norddahl	204	530	
	A21	6,429,006	08/06/02	Porro et al.	435	254	
✓	A22	6,475,759	11/05/02	Carlson et al.	435	139	

EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)



COPY

Form PTO-1449 (modified)

List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No.

2027.547096/RFE

Serial No.

10/068,137

Applicants

Danilo Porro et al.

Filing Date:

February 6, 2002

Group:

1652

U.S. Patent Documents

See Page 1

Foreign Patent Documents

See Page 1

Other Art

See Page 2

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
KK	A23	6,485,947	11/26/02	Rajgarhia et al.	435	139	
	A24	6,489,508	12/03/02	Van Gansbeghe et al.	562	589	
	A25	2003/0228671	12/11/03	Hause et al.	435	161	

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
KK	B1	WO 99/19503	April 22, 1999	PCT			
	B2	WO 99/14335	March 25, 1999	PCT			
	B3	WO 01/25180	April 12, 2001	PCT			
	B4	WO 02/42471	May 30, 2002	PCT			
	B5	EP 0 932 593 B1	April 24, 2002	EPO			
	B6	WO 00/71738 A1	Nov. 30, 2000	PCT			
	B7	WO 02/42471 A2	May 30, 2002	PCT			duplicate
	B8	WO 03/102152 A2	Dec. 11, 2003	PCT			
	B9	WO 03/102200 A2	Dec. 11, 2003	PCT			
	B10	WO 03/102201 A2	Dec. 11, 2003	PCT			

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
KK	C1	Chang et al., "Homofermentative Production of D- or L-Lactate in Metabolically Engineered Escherichia Coli RR1," <i>Applied Environ. Microbiol.</i> , 65(4):1384-1389, 1999.

EXAMINER:

[Signature]

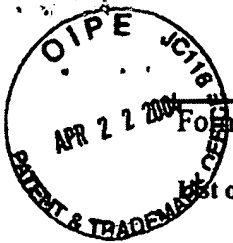
DATE CONSIDERED:

11/21/04

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

COPY

Page 3 of 3



Form PTO-1449 (modified)

List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No.

2027.547096/RFE

Serial No.

10/068,137

Applicants

Danilo Porro et al.

Filing Date:

February 6, 2002

Group:

1652

U.S. Patent Documents

See Page 1

Foreign Patent Documents

See Page 1

Other Art

See Page 2

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C2	Genga <i>et al.</i>, "Mitochondrial NAD⁺-Lactate Dehydrogenase and NAD⁺-D-Lactate Dehydrogenase in the Yeast <i>Saccharomyces Cerevisiae</i>," <i>Microbiologica</i>, 6(1):1-8, 1983. No copy filed Abs insuff
	C3	Goffin <i>et al.</i>, "Lactate Dehydrogenase-Independent Lactic Acid Racemization in <i>Lactobacillus Plantarum</i>" (2000) incomplete citation No source
KK	C4	✓ Hohmann, "Pyruvate Decarboxylases," In " <i>Yeast Sugar Metabolism</i> ", 11:187-211, 1997.
KK	C5	✓ Skory, "Isolation and Expression of Lactate Dehydrogenase Genes from <i>Rhizopus Oryzae</i> ," <i>Applied Environ. Microbiol.</i> , 66(6):2343-2348, 2000.
	C6	Skory, "Lactic Acid Production by <i>Saccharomyces Cerevisiae</i> Expressing A <i>Rhizopus Oryzae</i>-Lactate Dehydrogenase Gene," <i>J. Ind. Microbiol. Biotechnol.</i>, 30(1):22-27, 2003. No copy filed
KK	C7	✓ Zhou <i>et al.</i> , "Production of Optically Pure D-Lactic Acid in Mineral Salts Medium by Metabolically Engineered <i>Escherichia Coli</i> W3110," <i>Applied Environ. Microbiol.</i> , 69(1):399-407, 2003.
	C8	U.S. Application Serial No. 20020004611, filed January 10, 2002.
	C9	U.S. Application Serial No. 20030166179, filed September 4, 2003.
	C10	U.S. Application Serial No. 20030190630, filed October 9, 2003.
	C11	International Search Report for WO 98/15518, dated April 16, 1998.

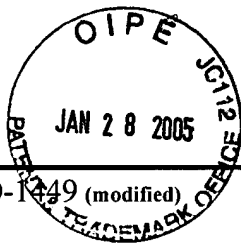
EXAMINER:

DATE CONSIDERED:

11/21/04

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)



REVISED

Page 1 of 1

Form PTO-1449 (modified)

Atty. Docket No.
2027.547096/RFESerial No.
10/068,137

List of Patents and Publications for Applicant's

Applicants
Danilo Porro et al.

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Filing Date:
February 6, 2002Group:
1652U.S. Patent Documents
*See Page 1*Foreign Patent Documents
*See Page 1*Other Art
See Page 1

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A26	2002/0004611	01/10/02	Eyal et al.	562	589	08/10/01
	A27	2003/0166179	09/04/03	Rajgarhia et al.	435	139	11/23/01
	A28	2003/0190630	10/09/03	Rajgarhia et al.	435	6	09/23/02

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C2	Genga <i>et al.</i> , "Mitochondrial NAD, L-Lactate Dehydrogenase and NAD, D-Lactate Dehydrogenase in the Yeast <i>Saccharomyces Cerevisiae</i> ," <i>Microbiologica</i> 6(1):1-8 (1983) (Abstract)
	C3	Goffin <i>et al.</i> , "Lactate Dehydrogenase-Independent Lactic Acid Racemization in <i>Lactobacillus Plantarum</i> " (2003) (Abstract, Mtg., <i>Belgian Soc. of Biochem. and Molec. Biol.</i> , 2/14/2003)
	C6	Skory, "Lactic Acid Production by <i>Saccharomyces Cerevisiae</i> Expressing a <i>Rhizopus Oryzae</i> Lactate Dehydrogenase Gene," <i>J. Ind. Microbiol. Biotechnol.</i> , 30:22-27 (2003)

EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.